

GUSEVA, Ye.A., Cand Med Sci -- (diss) "Cytological
studies in the diagnosis of chronic ^{infectious} ailments of
the upper maxillary sinuses." Mos 1958, 14 pp.
(Min of Health RSFSR, Mos Med Stomatological Inst)
225 copies (KL, 39-58, 111)

- 61 -

VASIL'YEVA, V.K.; GOL'DSHTEYN, M.M.; GUSEVA, Ye.A.

Changes in the latent period of cortical motor reaction in patients with pulmonary tuberculosis produced by therapeutic doses of phthivazid and streptomycin. Uch. zap. LGU no.239:8-17 '58. (MIRA 12:1)

1.Kafedra fiziologii cheloveka i zhivotnykh Leningradskego gosudarstvennogo universiteta i Leningradskiy tuberkuleznyy institut.

(STREPTOMYCIN) (ISONICOTINIC ACID) (CEREBRAL CORTIX)

USSR/Human and Animal Physiology (Normal and Pathological)
Neuro-Muscular Physiology.

T

Abs Jour : Ref Zhur Biol., No 6, 1959, 26931

Author : Berezina, M.P., Guseva, Ye.A.

Inst : Leningrad University

Title : The Removal of Asphyxial Nerve Parabiosis by Means of the
Action of Direct Current Anode

Orig Pub : Vestn. Leningr. un-ta, 1958, No 15, 133-139

Abstract : The nerve asphyxia was performed according to the method
described in earlier work of the authors (Tr. Leningr.
o-va yestestvoisp., 1935, 64, vyp. 3, 283). In the beg-
inning of nerve asphyxiation, the phase of shortening of
chronaxia was noted; later, the phase of its lengthen-
ing. In the process of development of asphyxial parabio-
sis in the altered part, a bi-phase change of lability

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USSR/Human and Animal Physiology (Normal and Pathological)
Neuro-Muscular Physiology.

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Abs Jour : Ref Zhur Biol., No 6, 1959, 26931

(initial increase of it, with subsequent decrease) was also noted. Excitability and conductivity of asphyxiated nerve which disappeared completely were restored in inclusion of a direct current anode in the conditions of continuing asphyxia.

Card 2/2

GORSHKOV, S.I.; GUSEVA, Ye.A.

Significance of the duration of the impulses of a current in obtaining tonic contractions of the skeletal muscles. Nerv. sist. no.1:83-88 '60. (MIRA 13:9)

1. Laboratoriya fiziologii nervnykh protsessov, Leningradskiy ordena Lenina gosudarstvennyy universitet im. A.A. Zhdanova.
(ELECTROPHYSIOLOGY) (MUSCLE)

ZAYONTS, V.I.; GUSEVA, Ye.A.

Electric conductivity of phenol and water-phenol solutions.
Zhur. prikl. khim. 34 no.5:1172-1174 My '61.

(MIRA 16:8)

1. Leningradskiy tekhnologicheskii institut imeni Lensoвета.
(Phenol—Electric properties)

Gibson, Ye. . .

Functional changes of a nerve under the influence of ascorbital sodium. Nerv. sist.(Leningrad) 2 no.3:99-102. (Elin 17:7)

1. Kafedra fiziologii cheloveka i zhivotnykh fiziologicheskogo instituta imeni Ukhtomskogo Leningradskogo gosudarstvennogo universiteta.

СЛАВОВА, А.А.; СЛАВОВА, А.А.

Reflex transition from tetanus to tetanus in the skeletal muscles.
Nerv. sist. no.5:64-65 '64. (MHA 18:3)

1. kafedra fiziologii cheloveka i zhivotnykh leningradskogo
gosudarstvennogo universiteta.

ACC NR: AP7004396

(N)

SOURCE CODE: UR/0226/67/000/001/0040/0043

AUTHOR: Bolgar, A. S.; Guseva, Ye, A.; Fesenko, V. V.

ORG: Institute of Problems of Material Science, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Thermodynamic properties of zirconium and hafnium carbides in the range 298-2500°K

SOURCE: Poroshkovaya metallurgiya, no. 1, 1967, 40-43

TOPIC TAGS: zirconium carbide, hafnium, carbide, thermodynamic property, ~~zirconium~~
~~carbide~~ enthalpy, ~~hafnium carbide~~ enthalpy

ABSTRACT: The values of the enthalpy of zirconium and hafnium carbides (Tables 1 and 2) in the range 1300—2500°K have been determined by means of the

Card 1/2

UDC: none

ACC NR: AP7004396

Table 1. Enthalpy
of zirconium carbide

T, °K	$H_f^\circ - H_{298}^\circ$ cal/mole
1340	12635
1523	14075
1643	15253
1728	16565
1798	17453
1800	17821
1898	18961
1908	19749
2053	21215
2083	21398
2140	22682
2175	23063
2260	24272
2400	26691
2550	28068

Table 2. Enthalpy
of hafnium carbide

T, °K	$H_f^\circ - H_{298}^\circ$ cal/mole
1305	11820
1505	14509
1725	16899
1851	18615
1900	19280
2005	20531
2050	21489
2125	22347
2148	22441
2277	24795
2507	27883

mixing method. On the basis of data obtained from this experiment and that in the literature, the enthalpy heat capacity, entropy and reduced potentials of the carbides were calculated for the temperature range 298—2500°K. Orig. art. has: 4 tables. [TD]

SUB CODE: 11, 20/ SUBM DATE: 28Jun66/ ORIG REF: 002/ OTH REF: 003
Card 2/2 ATD PRESS: 5116

GUSEVA, Ye.G.

Materials for the study of experimental neuroses by the food and defense reflex methods. Trudy Inst.fiziol. 5:25-34 '56. (MIRA 10:1)

1. Laboratoriya fiziologii i patologii vysshey nervnoy deyatel'nosti.
Zaveduyushchiy - P.P.Mayorov.
(CONDITIONED RESPONSE) (NEUROSES)

GUSEVA, Ye.G.

Functional state of the cerebral cortex and the healing of experimental burns in dogs. Trudy Inst.fiziol. 5:35-49 '56. (MLRA 10:1)

1. Laboratoriya fiziologii i patologii vysshey nervnoy deyatel'nosti.
Zaveduyushchiy - F.P.Mayorov.
(BURNS AND SCALDS) (CEREBRAL CORTEX)

USSR/Human and Animal Physiology (Normal and Pathological)
Nervous System. Higher Nervous Activity. Behavior.

T

Abs Jour : Ref Zhur Biol., No 6, 1959, 27050

Author : Guseva, Ye.G.

Inst : Institute of Physiology, Academy of Sciences USSR

Title : Further Study of Experimental Neurosis in Work on
Electro-Defensive Methods.

Orig Pub : Tr. In-ta fiziol. AN SSSR, 1957, 6, 192-202

Abstract : In experiments on the electro-defensive methods of
Protopopov, repeated change of the signal significance
of stimuli, lengthening of time of action of differen-
tiation (from 11 sec to $2\frac{1}{2}$ - 10 min) and application of
strong electrical current did not induce essential chan-
ges of conditioned-reflex activity in dogs of strong
type, and in dogs of weak type they led to a chronic

Card 1/2

USSR/Human and Animal Physiology (Normal and Pathological)
Nervous System. Higher Nervous Activity. Behavior.

Abs Jour : Ref Zhur Biol., No 6, 1959, 27050

neurotic condition. The latter was expressed in phase
relationships, frequently in skipping of conditioned
reflexes, total motor excitement at the time of pauses
and so forth. -- Ye.I. Plonskaya

*Lab. of Physiology & Pathology of Higher
Nervous Activity, Pavlov Inst. of
Physiology, USSR Acad. of Sci., Leningrad*

Card 2/2

GUSEVA, Ye.G. (Leningrad)

Effect of methyltestosterone on conditioned reflexes in
castrated dogs. Probl.endok. i gorm. 5 no.3:3-10 My-Je
'59. (MIRA 12:9)

1. Iz laboratorii fiziologii i patologii vysshey nervnoy
deyatel'nosti (zav. - prof.F.P.Mayorov) Instituta fiziologii
imeni I.P.Pavlova Akademii nauk SSSR (dir. - akad.K.M.Bykov).

(TESTOSTERONE, related cpds.

methyl testosterone, eff. on conditioned
reflex in castrated dogs (Rus))

(CASTRATION, exper.

eff. of methyl testosterone on conditioned
reflex in castrated dogs (Rus))

(REFLEX CONDITIONED

eff. of methyl testosterone in castrated
dogs (Rus))

GUSEVA, Ye.G.

Study of the limit of cortical (conditioned) inhibition. Nauch. soob.
Inst. fiziol. AN SSSR no.1:19-20 '59. (MIRA 14:10)

1. Laboratoriya fiziologii i patologii vysshey nervnoy deyatel'nosti
(zav. - F.P.Mayorov) Instituta fiziologii imeni Pavlova AN SSSR.
(CEREBRAL CORTEX) (CONDITIONED RESPONSE)

GUSEVA, Ye.G.

Limit of an elaborated inhibitory process in dogs with various types of nervous system. Zhur. vys. nerv. deiat. 11 no.6:1074-1082 N-D '61. (MIRA 15:3)

1. Pavlov Institute of Physiology, U.S.S.R. Academy of Sciences, Leningrad.

(CONDITIONED RESPONSE)
(NERVOUS SYSTEM)

GUSEVA, Ye.G.

Changes in the limit of differentiation inhibition under the effect of caffeine and amobarbital sodium. Zhur. vys. nerv. deiat. 14 no.3:480-488 My-Je '64. (MIRA 17:11)

1. Laboratory of Physiology and Pathology of Higher Nervous Activity, Pavlov Institute of Physiology, U.S.S.R. Academy of Sciences, Leningrad.

GUSEVA, Ye.G.

Limit of differentiation inhibition. Zhur. vys. nerv. deiat.
14 no. 4:687-694 JI-Ag '64. (MIRA 17:12)

1. Laboratory of Physiology and Pathology of Higher Nervous
Activity, Pavlov Institute of Physiology, U.S.S.R. Academy of
Sciences, Leningrad.

GUSEVA, Ye.K.; DYMSHITS, Ye.R.; MERKULOV, L.G.

Dislocation relaxation in NaCl crystals. Akust. zhur. 9 no.4:484-
486 '63. (MJRA 17:3)

1. Leningradskiy elektrotekhnicheskii institut imeni UL'yanova
(Lenina).

L 36539-66 EWT(1)/ENT(m)/T/EMP(t)/ETI/ENP(k) TIP(c) 3D

ACC NR: AP6016827

SOURCE CODE: UR/0046/66/012/002/0185/0187

AUTHOR: Guseva, Ye. K.

ORG: Leningrad Electrotechnical Institute im. V. I. Ul'yanov (Lenin) (Leningradskiy elektrotekhnicheskiy institut)

TITLE: Time dependent absorption of ultrasound in elastically-deformed aluminum

SOURCE: Akusticheskii zhurnal, v. 12, no. 2, 1966, 185-187

TOPIC TAGS: ultrasound absorption, aluminum, acoustic measurement, elastic stress, absorption coefficient, crystal defect, crystal dislocation phenomenon

ABSTRACT: The author investigated the influence of the duration of the action of elastic load on the time variation of ultrasound absorption in polycrystalline Al of 99.993% purity, containing Si, Fe, Cu, and Mg impurities. The measurements were made by a standard pulse method with longitudinal waves at room temperature at 15 Mcs. The sample in the form of a parallelepiped was annealed at 450C before the experiment and then subjected to an elastic compression only in its central part; the time variation of the ultrasound absorption coefficient was determined immediately after the removal of the load. The results show that the character of the absorption depends on the symmetry of the atmospheres of point defects which condense on dislocations. In the case of short applications of the load, the absorption was found to be proportional to $t^{1/3}$, and this can be attributed to planar symmetry of the atmospheres. A theoretical formula confirming this conclusion is derived. The authors thank L. G. Merkulov for direction of the work. Orig. art. has: 3 figures and 12 formulas.

SUB CODE: 20/ SUBM DATE: 28Dec64/ OTH REF: 002
Card 1/1

UDC: 534.286

605E VI 70 100
BELEN'KIY, Lyudvig Iosifovich; LIPATOV, S.M., retsenzant; KLYUCHAREV, S.V.,
retsenzant; GUSEVA, Ye.M., red.; KNAKNIN, M.T., tekhn. red.

[Theory of dyeing and experience with its practical application]
Teoriia krasheniia i opyt ee prakticheskogo primeneniia. Moskva,
Gos. nauchno-tekhn. izd-vo lit-ry po legkoi promyshl., 1958. 189 p.
(Dyes and dyeing) (MIRA 11:7)

GUSEVA, Ye.M., kandidat meditsinskikh nauk, Leningrad, ul. Khalturina
d.10, kv.7.

Experimental data on the absorption of radioactive sulfamethyl-
thiazole from fresh wounds. Vest. khir. 75 no.5:63-67 Ja '55.
(MLRA 8:10) ,

1. Iz kafedry fakul'tetskoy khirurgii (nach.-prof. A.V. Mel nikov)
Voyenno-Morskoy meditsinskoy akademii.

(SULFONAMIDES, metabolism,

absorp.from exper.wds.,labeled sulfonamides)

(WOUNDS AND INJURIES, experimental,

absorp.of labeled sulfonamides)

GUSEVA, Ye. M. Cand Med Sci -- "State of ~~the~~ higher nervous activity
and the ^{autonomic} ~~vegetative~~ nervous system in children with primary tuberculosis
(primary complex and bronchoadenitis) in antibacterial treatment." Mos,
1961 (Acad Med Sci USSR). (KL, 4-61, 208)

-335-

GUSEVA, Ye.M.

State of higher nervous activity and the vegetative nervous system in children with a primary combination and broncho-adenitis in antibacterial therapy. Probl.tub. 39 no.1:83-91 '61. (MIRA 14:1)

1. Iz kafedry tuberkuleza (zav. - prof. A.Ye. Rabukhin) Tsentral'nogo instituta usovershenstvovaniya vrachey i detskogo legochnogo otdeleniya Instituta tuberkuleza (zav. - prof. M.P. Pokhitonova) AMN SSSR.
(NERVOUS SYSTEM) (TUBERCULOSIS)

GUSEVA, Ye.M., dotsent; KALASHNIKOV, S.A.; PLOTKIN, L.L.

Lavsan as suture and ligation material. Vest. khir. 94 no.2:
79-82 F '65. (MIRA 18:5)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (nachal'nik - prof.
V.M. Sitenko) Voenno-meditsinskoy ordena Lenina akademii imeni
Kirova.

GUSEVA, YE. N. PHYSICIAN

CAND MED SCI

Dessertation: "Comparative Investigation of the Pharmacological Regulation of Functions
with Hypotensive and Partially pasmolytic Remedies."

25 May 49

Second Moscow State Medical Inst

Unein I.V. Stalin

SO Vecheryaya Moskva
Sum 71

1. GUSEVA, YE. N.
2. USSR (600)
4. Sleep
7. Medicinal sleep therapy. Klin. Med. 30, no. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, March 1963. Unclassified.

GUSEVA, Ye. N.

Jul/Aug 53

USSR/Medicine - Hypotensive Agents

"The Pharmacology of Antisympathin (I)", Ye. N. Guseva, Pharmacol Lab, Inst Physiol, Acad Med Sci USSR

Farmakol i Toksikol, Vol 16, No 4, pp 10-13

Biol agent I, isolated by A. A. Titayev from animal plasma, is effective in the therapy of high blood pressure, a condition in which there is a lack of I. I suppresses contraction of heart muscles and other muscles isolated from animals or treated in

270142

situ in animals narcotized with urethane. I produces a hypotensive effect after atropinization. The activity of I from the blood of dogs is weakened if exptl kaolin hypertension has been induced in the dogs. The content of I in the blood of alcohol is reduced during sleep due to barbamil or morphine and (to a smaller extent) under the action of alcohol or morphine.

270142

GUSEVA, E.N.

"Combination of Analgesics and Hypnotics"

Speech given at Pharmacological Conference in Ryazan, 17-19 June 1954

SO. Review of Eastern Med. Sci. Jan.-Mar. 1956 Uncl.

GUSEVA, Ye. N.

USSR.

The action of pain-relieving and other substances in experimental heat burns. Ye. N. Guseva (Inst. Pharmacol., Exptl. Chemotherapy, and Chemiluminescence, Acad. Med. Sci. U.S.S.R., Moscow). *Sov. Eksp. Biol. i Med.* 38, No. 10, 66-7 (1964).—Heat burns were produced by immersing white mice of 20-23 g. halfway into water of 65° for 30 sec. Longer periods of immersion or higher temps. killed the animals in too short a time to be of exptl. value. Injection of 0.2-0.25 ml. of the various strengths of the pain-relieving drugs or related substances was initiated 1 min. after the burns were inflicted and administered once daily thereafter for 6 days. Barbitall and noctai acted as pain relievers and induced sleep lasting 2-4 hrs.; dimedrol displayed pain-relieving antihistaminic and sedative effects. The therapeutic effect of promedol and of phosadont proved to be of a considerably lower level than morphine. Adrenalin, benzoline, and phenamine were devoid of any pain-relieving properties. With the exception of analgesic and barbitall, none of the drugs used prevented the appearance of symptoms of inflammation and dermoecrosis. B. G. Levine

GUSEVA, Ye.N.

On the problem of the combined actions of analgesic morphine
substitutes and analeptics. *Farm.i toki*. 19 supplement:17 '56.

(MIRA 10:7)

1. Laboratoriya obshchey farmakologii (zav. - zasluzhennyy deyatel'
nauki, deyatel'nyy chlen Akademii meditsinskikh nauk SSSR prof.
V.I.Skvortsov) Instituta farmakologii, eksperimental'noy khimioterapii
i khimioprofilaktiki Akademii meditsinskikh nauk SSSR.

(ANALGESICS)

(STIMULANTS)

GUSEVA, Ye.N.

Comparative analgesic effects of promedol, phenadone, tecodine, and morphine. Farm.i toks. 19 supplement:17-18 '56. (MLRA 10:7)

1. Laboratoriya obshchey farmakologii (sav. - sasluzhenyy deyatel' nauki, deystvitel'nyy chlen AMN SSSR prof. V.I.Skvortsov) Instituta farmakologii, eksperimental'noy khimioterapii i khimioprofilaktiki AMN SSSR.

(ANALGESICS,

phenadone, promedol, tecodine & morphine, comparison in animals (Rus))

(MORPHINE, effects,

analgesic, comparison with phenadone, promedol, & tecodine (Rus))

Pharmacological properties of dimedrol. N. B. Vygodskaya, E. N. Gerasim, G. S. Kotoza, N. A. Kyshyavina, and M. F. Rumova. *Farmakol. i Toksikol.* 19, No. 1, 21-4 (1956). Dimedrol in moderate doses in mice, rabbits, and guinea pigs inhibits motor functions slightly but is not narcotic. In toxic doses (60-120 mg./kg., mice and guinea pigs), daily for 5-6 days, there was no sign of acclimatization. Daily doses of 10 mg./kg. for 58 days had no harmful effects (per os, mice and rats). Other effects include antihistaminic and antiamphylactic action; transitory hypotensive action and effects on cardiac rhythm (but no change in the peaks of electrocardiograms); moderate analgesic effect in rats and local anesthesia in rabbits and frogs; and accelerated respiration (cats). Dimedrol is not antispasmodic after toxic doses of curazole or camphor nor against a.c. passed through the brain. It does not impair the peripheral blood picture after prolonged parenteral dosage (10 mg./kg., mice). Julian F. Smith.

Pharmacology of 2,4-D. Y. E. K. Guseva. *Parmedkol. T. Tskitol.* 19, No. 4, 41-4 (1950). For 2,4-D in mice the L.D.₅₀ is 220 mg./kg. (subcutaneous dosage); for 2,4-ClMe-C₆H₄OCH₂COONa, 401. Daily injection of 0.1 mg. for 12 days caused no toxic effects. In rats 2,4-D is hypotensive at 20-30 mg./kg. (intravenously), and this effect is not impaired by atropinization. Zymase activity is stimulated *in vivo* in the concn. range 0.025-250 mg. %, and blood catalase in the range 0.0025-0.025 mg. %. Other enzymes (cholinesterase, amylase, urease) are inhibited in the range 25-250 mg. %. At 10-100 mg. % 2,4-D inhibits germination of wheat. At 10-100 mg./kg. in rats and mice it did not impair motor activity nor alleviate strychnine spasms. Julian P. Smith

GUSEVA, Ye.N.

Pharmacology of a preparation of 2, 4-dichlorophenoxyacetic acid.
Farm. i toks. 19 no.4:45 J1-Ag '56. (MIRA 9:10)

1. Laboratoriya obshchey farmakologii (sav.-deystvitel'nyy chlen
Akademii meditsinskikh nauk SSSR prof. V.I. Skvortsov) Instituta
farmakologii i eksperimental'noy khimioterapii Akademii meditsin-
skikh nauk SSSR.

(2,4 - D) (PHARMACOLOGY)

GUSEVA, Ye.N.

Comparative effects of promedol, phenadone, and tecodine on respiration and on experimental cough. Farm. i toks. 19 no.5: 17-22 S-0 '56. (MLRA 10:3)

1. Laboratoriya obshchey farmakologii (rav. - deystvitel'nyy chlen AN SSSR prof. V.I.Skvortsov) Instituta farmakologii, eksperimental'noy khimioterapii i khimioprofilaktiki AN SSSR.

(RESPIRATION, effect of drugs on,

4-phenyl-4-propoxy-1,2,5-trimethyl piperidine HCl, 6-dimethylamino-4,4-diphenylheptane-3-one HCl, & hydroxy caffeine HCl (Rus))

(COUGH, experimental,

eff. of 4-phenyl-4-propoxy-1,2,5-trimethyl piperidine HCl, 6-dimethylamino-4,4-diphenyl-heptane-3-one HCl, & hydroxy caffeine HCl (Rus))

GUSEVA, Ye.N.; KOROZA, G.S.; KUDRYAVINA, N.A.

Pharmacology of vitamin P. Farm. i toks. 19 no.6:39-43 N-D '56.

(MLRA 10:2)

1. Laboratoriya chastnoy farmakologii (rukovoditel' - deystvitel'nyy chlen AMN SSSR prof. V.I.Skvortsov) Instituta farmakologii i eksperimental'noy khimioterapii AMN SSSR.

(VITAMIN P.

pharmacol. (Rus))

GUSEVA, Ye. N.

✓ Effect of a vitamin P-containing preparation from tea leaves upon the morphology of the blood and some biochemical values. M. F. Runova, E. L. Pravotorova, and E. N. Guseva (Inst. Pharm., Exptl. Chemotherapy and Chem.-prophylaxis, Moscow). *Byull. Ekspil. Biol. i Med.* 41, No. 3, 54-8(1960).--The vitamin P-contg. prepn. extd. from tea leaves is used in conditions resulting from increased capillary fragility. Besides increasing the no. of platelets it has no effect upon the blood morphology. Repeated injections lead to shortened coagulation time and hyperthrombinemia. No changes were found in the glycogen content of the heart, skeletal muscle, or liver, in creatine phosphate, adenosinetriphosphoric acid, and inorg. phosphates of the cardiac muscle, the level of CO_2 in venous and arterial blood, nor the O in arterial blood. The O level of venous blood decreases following single or repeated injections of the prepn. When given in small doses it depresses the action of cholinesterase, urease, catalase, and amylase.

A. S. Mirkin

3

GUSEVA, E. N.

Effect of a vitamin P-containing preparation from tea leaves on the morphology of the blood and some biochemical values. M. F. Rucova, E. I. Pivovarova, and E. N. Guseva. Bull. Exptl. Biol. and Med. (U.S.S.R.) 41, 1951 (1952) (English translation). — Ex. C.A. 50, 169544.
E. N. R.

3

EXCERPTA MEDICA Sec.2 Vol.11/1 Physic-Biochem, etc. Jan 58
GUSEVA, E. N.

369. COMBINED ACTION OF ANALGETIC MORPHINE SUBSTITUTES WITH
ANALEPTICS (Russian text). Guseva E. N. FARMAKOL. I TOKSIKOL.
1957, 20/1 suppl. (17)

Morphine and morphine-like drugs were combined with caffeine or amphetamine and also with barbiturates: phenobarbital (I) and 5-(2-bromoallyl)-5-isopropylbarbituric acid (II). Small doses of caffeine and amphetamine increased the effect of the analgetic drugs, higher doses decreased it. Small doses of the barbiturates, especially II increased the action of the analgetics. A combination of II, an analeptic and an analgetic caused a significantly greater analgetic effect in rats. The best analgetic effect was seen with s.c. administration of the combination of 0.3 mg./kg. of caffeine or amphetamine with 30 mg./kg. of II and any of the morphine-like drugs.

Rašková - Prague

GUSEVA, Ye. N.

USSR/Pharmacology. Toxicology. Various Preparations.

V-9

Abs Jour : Ref Zhur-Biol., No 6, 1958, 28215.

Author : Guseva Ye. N.

Inst : Not given.

Title. : Effect of 2-4-Dichlorophenyloxyacetic Acid on the Regenerative Processes in Experiments.

Orig Pub : Farmakol. i toksikologiya, 1957, 20, No 4, 71-74.

Abstract : The preliminary subcutaneous administration of sodium 2-4-dichlorophenyloxyacetate (1) in doses of 1 mg/kg in experiments on guinea pigs (16) shortened the period of healing of cornea defects. In experiments on mice (84) benzoline (5 mg/kg) and 1 (2.5mg/kg) hastened the healing of cutaneous defects. In experiments on rats (30) and guinea

Card 1/2

USSR/Pharmacology. Toxicology. Various Preparations.

V-9

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R000617610014-5"

Abs Jour : Ref Zhur-Biol., No6, 1958, 28215.

Abstract : pigs (14) benzoline and 1 did not effect the speed of regeneration of the peripheral segment of the sciatic nerve.

Card 2/2

URYUPOV, Yu.S.; IVANOV, Yu.N.; GUSEVA, Ye.N.; KAZAKOV, P.M.

Professor Mikhail Vasil'evich Sergievskii. Kas.-med.shur. 40
no.2:92-94 Mr-Ap '59. (MIRA 12:11)
(SERGIEVSKII, MIKHAIL VASIL'EVICH, 1898-)

GUSEVA, Ye. N. (Kuybyshev)

K voprosu o neposredstvennoy chuvstvitel'nosti mogza k khimicheskim
veshchestvam

report submitted for the First Moscow Conference on Reticular Formation,
Moscow, 22-26 March 1960.

GUSEVA, Ye.N.

Adrenolytic hypothesis of the mechanism of analgesia. Fiziol.zhur.
47 no.8:958-964 Ag '61. (MIRA 14:8)

1. Research Group, attached to M.V.Sergiyevski, Corresponding Member,
U.S.S.R. Academy of Medical Sciences, Kuybyshev.
(ANALGESIS) (ADRENERGIC BLOCKING AGENTS)

POPEMENKOVA, Z.A.; GUSEVA, Ye.V.

Effect of indopan, a monoamine oxidase inhibitor, on the sensitivity of white mice and rats to tetracycline and pneumococcal infection. Antibiotiki. 10 no.5:432-435 My '65. (MIRA 18:6)

1. Otdel infektsionnoy patologii i eksperimental'noy terapii infektsiy (zav. - chlen-korrespondent AMN SSSR prof. Kh.Kh. Planel'yes) Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR, Moskva.

POPENENKOVA, Z.A.; GUSEVA, Ye.V.

Effect of indopan, a monoamine oxidase inhibitor, on the sensitivity of rats and mice to antibiotics. Farm. i toks. 28 no.6:734-737 N-D '65. (MIRA 19:1)

1. Otdel infektsionnoy patologii i eksperimental'noy terapii infektsiy (zav. - chlen-korrespondent AMN SSSR prof. Kh.Kh. Planell'yes) Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei AMN SSSR, Moskva.

GUSEVA, YU. I.

PEKHLETSKAYA, V.Ya.; GUSEVA, YU.I.; YEVDOKINOVA, M.N.

Detection of colonies of dysentery germs under oblique transmitted illumination; author's abstract. Zhur.mikrobiol.epid. i immun. 29 no.2:113-114 F '58. (MIRA 11:4)

1. Iz Moskovskogo instituta vaktsin i syvorotok imeni Mechnikova. (SHIGELLA) (MICROSCOPY)

KHEYFETS, L.B.; KILESSO, V.A.; KAPIAN, A.Ye.; GURALEVICH, G.S.; TIMEN, Ya.Ye.;
SKROZNIKOVA, A.V.; GUSEVA, Yu. I.

Epidemiological results of an investigation of polyvaccine. Zhur. mikrobiol.
epid. i immun. 29 no.10:44-48 0 '58. (MIRA 11:12)

(VACCINES AND VACCINATION,

typhoid paratyphoid-dysenterial polyvaccines, field re-
sults (Rus))

(DYSENTERY, BACILLARY, prev. & control,
same)

(TYPHOID FEVER, prev. & control,
same)

(PARATYPHOID FEVER, prev. & control,
same)

[illegible]

"Hygienic evaluation of the experience of rendering harmless the drainage waters on agricultural lands."

report submitted at the 13th All-Union Congress of Hygiene, Epidemiologists and Infectionists, 1959.

GOLUBEVA, I.V.; PEKHELETSKAYA, V.Ya.; GUSEVA, Yu.I.; KOSSOVA, A.K.; KAS'YANOVA,
L.K.

Production of dry standard antigens for the preparation of diagnostic
coli-sera. Zhur. mikrobiol. epid. i immun. 31 no.7:127-130 J1 '60.
(MIRA 13:9)

1. Iz Moskovskogo instituta vaktsin i syvorotok im. Mechnikova.
(ESCHERICHIA COLI)

PEKHLETSKAYA, V.Ya. [deceased]; GUSEVA, Yu.I.

Determination of H antigen in pathogenic *Escherichia coli*.

Zhur. mikrobiol., epid. i immun. 41 no.1:72-76 Ja '64.

(MIRA 18:2)

1. Moskovskiy institut vaktsin i syvorotok imeni Mechnikova.

GOLUBEVA, I.V.; PEKHLETSKAYA, V.Ya. [deceased]; GUSEVA, Yu.I.; ULISKO, I.N.;
RAGINSKAYA, V.P.; SMIRNOVA, T.V.; BARATS, M.M.; ABROSIMOVA, N.A.;
POCOREL'SKAYA, S.A.; PROKOPOVICH, A.V.; ALEKSEYEVA, R.A.

Accelerated and simplified method of laboratory diagnosis of
intestinal coli infections with the use of liquids containing
specific serum media. Zhur.mikrobiol., epid. i immun. 42
no.2:21-26 F '65. (MIRA 18:6)

1. Moskovskiy institut vaktsin i syvorotok, Ufimskiy institut
vaktsin i syvorotok, Dnepropetrovskiy institut epidemiologii;
mikrobiologii i gigiyeny, Gor'kovskiy institut epidemiologii,
mikrobiologii i gigiyeny, Moskovskiy pediatricheskiy nauchno-
issledovatel'skiy institut i Leningradskiy pediatricheskiy
meditsinskiy institut imeni Kirova.

ROGOZHKINA, A.Ye., inzh.; GUSEVA, Z.A., inzh.

Effect of absolute part dimensions on the fatigue curve.
Vest. mashinostr. 43 no.6:37-38 Je '63. (MIRA 16:7)

(Metals—Fatigue)

GUSEVA, Zh. A

PHASE I BOOK EXPLOITATION

SOV/5568

Didenko, Konstantin Ivanovich, and Zhemio Aleksandrovna Guseva

Novaya apparatura kontrolya i regulirovaniya (New Monitoring and Regulating Equipment) Moscow, Mashgiz, 1961. 22 p. Errata slip inserted. 12,000 copies printed.

Reviewer: I. Ts. Chervyakovskiy, Engineer; Ed.: L. Ts. Kalika, Engineer;
Ed. of Publishing House: M. S. Yeliseyev; Tech. Ed.: G. V. Smirnova;
Managing Ed. for Literature on Means of Automation and Instrument
Construction: N. V. Pokrovskiy, Engineer.

PURPOSE: This book is intended for technical personnel engaged in designing, assembling and operating monitoring and regulating installations for manufacturing processes. It may also be useful to students in schools of higher technical education and tekhnikums in preparing term or degree projects.

Card 1/7-

New Monitoring and (Cont.)

SOV/5568

COVERAGE: The book describes the new models of monitoring and regulating equipment developed at the KIP zavod (Control and Measuring Instruments Plant) of the Khar'kov sovmarkhoz. Operating and design principles are described. The mathematical analysis of instrument and regulator operation and their basic technical characteristics are given. Circuits of external connections and overall dimensions of the equipment are presented. Long-distance communication systems using ferrodynamic pickups, compensated measuring instruments, and electrohydraulic systems of automatic regulation are described. The appendix contains examples of the application of the KIP Plant monitoring and regulating equipment in the metallurgical industry. No personalities are mentioned. There are 20 references, all Soviet.

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Foreword

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Card ~~2~~/7

L 04309-67 EWT(m)/I/EWP(w)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6018266 (A)

SOURCE CODE: UR/0133/66/000/002/0174/0175 61

AUTHORS: Bushmin, V. S.; Kalinina, Z. M.; Guseva, Z. F.; Kolyasnikova, R. I.;
Antropova, N. G.; Chikina, V. G. 60 B

ORG: Chelyabinsk Metallurgical Scientific Research Institute (Chelyabinskiy n.-i.
institut metallurgii); Zlatoust Metallurgical Plant (Zlatoustovskiy
metallurgicheskiy zavod)

TITLE: Production technology and properties of valve steel EI992 6

SOURCE: Stal', no. 2, 1966, 174-175

TOPIC TAGS: alloy steel, metallurgic research, valve, engine component, internal
combustion engine / EI992 alloy steel

ABSTRACT: A new valve steel (EI992) has been developed. It is designed for use
in construction of valves for high compression automobile engines. The micro-
structure, hardness, and the usual mechanical properties of the steel were deter-
mined, and the results are tabulated. A brief description of the manufacturing
process is presented. The following technique for valve production was developed:
1) thermal treatment after drop-forging with attainment of 20--26 R_c hardness;
2) mechanical treatment; 3) surfacing the face of valve head; 4) filling with

Card 1/2

UDC: 621.785.669.15:62-332

L 04309-67

ACC NR: AP6018266

sodium and sealing; 5) complete thermal treatment (quenching from 1050—1080C in oil or air and annealing at 760—800C). Valves made from steel EI992 have been successfully tested and are used at present in truck engines. Orig. art. has: 2 tables and 1 graph.

SUB CODE: 11, 13/SUBM DATE: none

Card

2/2

L 29905-66 EWT(m)/ENP(e) WH
ACC NR: AP6006465

SOURCE CODE: UR/0064/65/000/010/0757/0758

AUTHOR: Shpunt, S. Ya.; Arkhipova, L. N.; Leneva, Z. L.; Guseva, Z.I.

ORG: none

TITLE: The decomposition of apatite by hydrofluoric acid yielding phosphoric acid

SOURCE: Khimicheskaya promyshlennost', no. 10, 1965, 757-758

TOPIC TAGS: fluorine, fluorine compound, hydrofluoric acid, filtration, phosphoric acid

ABSTRACT: The article gives the reaction and describes the flow schemes for the decomposition of apatite by hydrofluoric acid yielding phosphoric acid. The hydrofluoric acid for this purpose can be obtained from "poor" fluorspar with a large amount of impurity in the form of SiO_2 which, when the ore is treated with sulfuric acid, forms fluosilicic acid which also forwards the decomposition of the apatite. The CaF_2 obtained from the two stage decomposition reaction can be used to prepare pure hydrofluoric acid. In the experiments technical hydrofluoric acid containing $\sim 33\%$ HF and $\sim 5\%$ H_2SiF_6 was used. The experiments proceeded at $\sim 100^\circ\text{C}$ in a laboratory reaction vessels

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L 29905-66

ACC NR: AP6006465

fitted with an electric heater and a mixer and lasted about 30 min. The filtration rate of the precipitate reckoned in dry precipitate was 1,400 kg/(m².hr). The phosphoric acid yield contained 45-48% P₂O₅, 0.3-0.6% CaO and 5-8% F and can be used for the production of double superphosphate or of ammonium phosphates. The flow scheme for the preparation of double superphosphate through the reaction of phosphoric acid and calcium fluoride is also given. Orig. art. has 3 figures and 4 formulas.

SUB CODE: 07/ SUBM DATE: none/ SOV REF: 002

Card 2/2 CC

SHPUNT, S.Ya.; GUSEVA, Z.I.

Investigating the fusion of mixtures in connection with the
manufacture of portland cement and sulfurous anhydride from
phosphogypsum (phosphoric anhydride). [Trudy] NIUIF no.160:
77-116 '58. (MIRA 12:8)
(Portland cement) (Sulfur dioxide) (Gypsum)

SHPUNT, S.Ya.; ARKHIPOVA, L.N.; LENEVA, Z.L.; GUSEVA, Z.I.

Obtaining phosphoric acid by the decomposition of magnium-
containing phosphorites with fluosilicic acid. Khim. prom.
42 no.9:674-678 S '65. (MIRA 18:9)

SRPUNT, S.Ya.; ARKHIFOVA, L.N.; LENEVA, Z.I.; GUSEVA, Z.I.

Decomposition of apatite by hydrofluoric acid with the recovery
of phosphoric acid. Khim. prom. 41 no.10:757-758 O '65.
(MIRA 18:11)

GUSEVA, Z.L., assistant

Method of chemical determination of scandium in coal ash.
Nauch. trudy MGI no.27:81-88 '59. (MIRA 14:6)
(Coal--Analysis) (Scandium--Analysis)

GUSEVA, Z.M.; LEONOV, P.A., otv.red.

[Moisture repellant inert dust and the advantageouaness of using
it in Kuznetsk Basin mines] Vlagoustoichivais inertnaia pyl'
i tselesoobraznost' ee primeneniia na shakhtakh Kuzbassa. Tomsk,
Nauchno-tekhn.gornoe ob-vo, 1958. 14 p.

(MIRA 14:2)

(Kuznetek Basin--Coal mines and mining--Safety measures)

GUSEVA, Z.M., inzh.

Investigating moisture-resistant inert dust. Izv. vys. ucheb. zav.;
gor. zhur. no.2:73-76 '58. (MIRA 11:5)

1. Tomskiy politekhnicheskii institut.
(Mine dusts)

GUSEVA, Z.M., inzh.

Moisture-resistant inert dust used in shale barriers. Bezop.truda v
prom. 2 no.9:22-23 S '58. (MIRA 11:9)

1.Tomskiy politekhnicheskij institut.
(Coal mines and mining--Safety measures)

GISWA, Z.M., Cand Tech Sci -- (diss) "Study of^{the} basic properties of
moisture-resistant inert dust for shale screens." Leningr., 1959.

12 pp. Min of Higher Education USSR. Comm. Order of Labor Red
Banner Polytech Inst in S.M. Kirov), 150 copies (U.S.S.R., 114)

-16-

(705641), 4-1
GUSEVA, Z.P.

Consolidated calculation of cost in designing machinery. Log. prom.
18 no.1:4-6 Ja '58. (MIRA 11:2)

(Machinery--Estimates and costs)

GUSEVA, Z.P., kand. tekhn. nauk.

Determining the efficiency in designing shoemaking and sewing
machines. Leg. prom. 18 no.3:4-6 Mr '58. (MIRA 11:4)
(Shoe machinery) (Sewing machines)

GUSEVA, Z.P., dots., kand. tekhn. nauk

Indices of the workability of designed machines. Leg.prom.
18 no.10:14-15 0 '58. (MIRA 11:11)
(Machinery--Design)

GUSEVA, Z. V.

Botany - Study and Teaching

Indoor cultivation of lemon. Est. v shkole No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

GUSEVI, V.Ye., prof.

Ways of preserving the length of wool and synthetic fibers in
the carding process. Tekst.prom. 20 no.10:13-14 0'60.

(MIRA 13:11)

(Carding)

GUSEVA-CRYZLOVA, Z. L.

"The Action of Fertilizers on the Yield and Quality of *Erysimum Canescens*." Cand Agr Sci, Moscow Agricultural Acad imeni Timiryazev, Moscow, 1953. (RZh^Biol, No 2, Sep 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (10)

So: Sum. No. 481, 5 May 55

SOMOV, Vasilii Iosifovich; GUSEVICH, N.A., red.; YERMAKOV, M.S.,
tekhn. red.

[The economic law of the rising productive capacity of
public labor] Ekonomicheskii zakon povyshaiushcheisia
proizvoditel'noi sily obshchestvennogo truda. Moskva,
Izd-vo Mosk. univ., 1963. 258 p. (MIRA 17:1)

GUSEVSKIY, V.N.; KAPLAN, S.Z.; AL'TMAN, S.S.

Change in the properties of thickened oils during heating.

Khim. i tekhn. topl. i masel 4 no.1:53-59 Ja '59.

(MIRA 12:1)

(Lubrication and lubricants)



7(0), 15(8)

SOV/32-25-2-44/78

AUTHORS:

Kaplan, S. Z., Makridin, Yu. V., Gusevskiy, V. N.

TITLE:

An Apparatus for the Determination of the Depolarization Resistance of Polymers (Pribor dlya opredeleniya depolimerizatsionnoy ustoychivosti polimerov)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 2, p 219 (USSR)

ABSTRACT:

Additions of polyisobutylene, vinipol etc dissolved in lubricating oils decompose when heated, thus changing the viscosity of the oil. An apparatus has been designed which makes it possible to test simultaneously 8 oil samples containing such additives. The design is a modification of the standard apparatus by Pinkevich (GOST 5162-49) for the determination of the corrosiveness of oils. Each of the eight test tubes (Fig) containing an oil sample has a spherical cooler and a glass agitator (Fig). The latter is driven by the mechanism of the apparatus. The samples are heated up to a maximum temperature of 220° by an oil bath. The samples are taken by means of a pipet. The reliability of the apparatus described was proven by an experimental operation over

Card 1/2

An Apparatus for the Determination of the Depolarization Resistance of Polymers SOV/12-25-2-44/78

a period of 400 hours. The limit of error for two parallel determinations amounts to maximally $\pm 2\%$. There are 1 figure and 1 Soviet reference.

Card 2/2

L 5120-66 EWT(1)/EWA(h)

ACCESSION NR: AP5026301

UR/0144/65/000/008/0874/0880

621.375.3+621.382.3

AUTHOR: Aronov, M. I. (Engineer); Gusevskiy, Yu. I. (Engineer)

TITLE: Characteristics of a magneto-semiconductor amplifier in the negative control current region

SOURCE: IVUZ. Elektromekhanika, no. 8, 1965, 874-880

TOPIC TAGS: magnetic amplifier, transistorized amplifier, amplifier design, semiconductor device, automatic control system

ABSTRACT: Magneto-semiconductor amplifiers are presently in widespread use in automatic control systems. The present article investigates theoretically and experimentally a semiconductor amplifier the modulator of which consists of a magnetic amplifier with internal feedback. The operation of such an amplifier in the negative control current region is studied, equations for the determination of the output current of the magnetic amplifier are derived, and recommendations are offered which may prove useful in the design of similar circuits. Experimental results confirmed the theoretical predictions and justified

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L 5120-66

ACCESSION NR: AP5026301

the simplifying assumptions made in the development of the theory. Orig. art. has: 22 formulas and 5 figures.

ASSOCIATION: None

SUBMITTED: 17Jul63

ENCL: 00

SUB CODE: EC, IE

NO REF SOV: 004

OTHER: 001

PC
Card 2/2

L 56536-65 EWI(1)/EWA(h) Pub

ACCESSION MK: AP5016771

UA/0286/85/000/010/0088/0086

681.14

20

19

B

AUTHOR: Gurevskiy, Yu. I.

TITLE: A pulse-time multiplier. Class 42, No. 171178

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 10, 1965, 86

TOPIC TAGS: computer component, pulse time modulation, computer technology

ABSTRACT: This Author's Certificate introduces a pulse-time multiplier which uses magnetic and semiconductor elements. The design provides for improved accuracy, a wide dynamic range, elimination of the necessity for regulated ac power supplies and simplified adjustment. The device contains a full-wave voltage converter with a saturable transformer. This converter is fed from a differential power supply which consists of a potentiometer and a stabilatron tube. The multiplier also contains a bias circuit for maintaining a constant amplitude in the base current of the output transistor, and a ballast load resistor which is connected to the output winding of the transformer during its idle period.

ASSOCIATION: Nauchno-issledovatel'skiy institut po tyazhelomu elektromashinostro-

Card 1/2

L 56536-65

ACCESSION NR: AP5016771

yeniyu (Scientific Research Institute of Heavy Electric Machine Building)

SUBMITTED: 18May64

ENCL: 00

SUB CODE: DP

NO REF SOV: 000

OTHER: 000

ms
Card 2/2

ARONOV, Mark Isaakovich, inzh.; GUSEVSKIY, Yuriy Il'ich, inzh.

Operational characteristics of a transistorized magnetic amplifier
in the region of negative control currents. Izv.vys.kohab.zav.;
elektromekh. 8 no.8:874-880 '65. (MIRA 18:10)

GUSEYEV, Aleksandr Georgiyevich; YANCHUR, Aleksandr Mikhaylovich; KATSAUROV, I.N., redaktor; SMIRNOV, L.V., redaktor; ALADOVA, Ye.I., tekhnicheskii redaktor.

[Collection of examples and problems in mining] Sbornik primerov i zadach po provedeniiu gornykh vyrabotok. Moskva, Ugletekhizdat, 1956.
147 p. (Mining engineering) (MIRA 9:6)

GUSEYEV, G.P.

Water injection into a gas cap or gas-oil contact and its effect
on oil recovery. Azerb. neft. khos. 39 no.7:17-20 J1 '60.

(Oil field flooding)

(MIRA 13:10)

GUSEYEV, N. V.

PA5/49T93

USSR/Medicine - Fish
Medicine - Nutrition

May 48

"Spotted Red Rot in Food Fish in the Sea of Azov,"
N. V. Guseyev, $1\frac{1}{2}$ pp

"Priroda" No 5

Red rot was observed in carp, bream, and pike perch
in the Sea of Azov, 1936 - 1938. It is considered
to be a virus disease. Guseyev summarizes results
of observations made in 1938 on 72,198 fish.

5/49T93

TAHANAYEV, I.V.; GUSEYEVA, L.S.

Interaction of zirconium and fluorine ions in a solution. Khim.
redk.elem. no.2:46-56 '55. (MLRA 9:4)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.Kurnakova
AN SSSR.

(Fluorine) (Zirconium)

GUSEYN, A., inzh.po izobretatel'stvu; ABRAMYAN, T., starshiy inzh.

We are improving compressors. Neftianik 6 no.7:20-21 J1 '61.
(MIRA 14:7)

1. Neftepromyslovoye upravleniye Azisbekovneft' (for Guseyn).
2. Normativno-issledovatel'skaya stantsiya Asnefti (for Abramyan).
(Compressors)

GUSEYN-ZADE, Z.I.; ALESKEROV, S.S.

Determining the gas velocity minimal for the initial exclusion
of condensate from a well. Izv. vys. ucheb. zav.; neft' i gaz 8
no.4:33-36 '65. (MIRA 18:5)

1. Azerbaydzhanskiy institut nefti i khimii im. M.Azizbekova.

GUSEYNBKOV, Z.A., LIVANOV, M.I.

Study of capillary resistance in children with rheumatic fever.
Azerb.med.zhur. no.8:72-75 Ag '58 (MIRA 11:9)

1. Iz kafedry detskikh bolezney lechebno-profilakticheskogo
fakul'teta (zav. prof. Z.A. Guseynbekov) Azerbaydzhanskogo gosu-
darstvennogo meditsinskogo instituta im. N.Narimanova (direktor-
zaslyzhenny, deyatel' nauki, prof. D.A. Eyvazov.).
(RHEUMATIC FEVER)
(CAPILLARIES)

GUSEYNBEYLI, T.A.

Result of parenteral administration of the bone marrow in complex therapy of malarial anemia. Klin. med., Moskva 31 no.6:71-74 June 1953. (GIML 25:1)

1. Of the Therapeutic Division of the Fourth Municipal Clinical Hospital (Head Physician -- N. A. Rasulov) and of the First Propedeutic Department of Internal Diseases (Head -- Prof. G. Kh. Baysheva-Zaynalova), Azerbayd-zhan Medical Institute.

GUSEYNBEKOVA, A.M.

Asymptotic expansion of eigenfunctions and eigenvalues in
problems with potential wells. Izv. AN Azerb. SSR. Ser. fiz.-mat.
i tekhn. nauk no.6:49-67 '60. (MIRA 14:8)
(Eigenfunctions) (Eigenvalues)
(Boundary value problems)

37538

S/044/62/000/004/025/099

C111/C444

162400

AUTHOR:

Guseynbekova, A. M.

TITLE:

The asymptotic expansion of the eigenfunctions and eigenvalues in problems with potential wells. The asymptotic expansion of the eigenfunctions and eigenvalues of a self-adjoint differential operator of second order with continuous large coefficients

PERIODICAL:

Referativnyy zhurnal, Matematika, no. 4, 1962, 34, 35, abstract 4B155. (Izv. AN AzerbSSR. Ser. fiz.-matem. i tekhn. n., 1960, no. 6, 49 - 67; 1961, no. 2, 13 - 25)

TEXT:

Considered are the problems I and II of the asymptotic expansion of the eigenfunctions $y_{i\epsilon}(x)$ and the eigenvalues $\lambda_{i\epsilon}$ ($i = 1, 2, 3, \dots$) of the operator

$$L_{\epsilon}y = -\frac{d}{dx} \left[k(x) \frac{dy}{dx} \right] + C_{\epsilon}(x)y \quad (1)$$

in terms of the parameter ϵ for the boundary conditions

$$y|_{x=-1} = 0; \quad y|_{x=+\infty} = 0 \quad (2)$$

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S/044/62/000/004/025/099
C111/C444

The asymptotic expansion of the...

and the subdivision condition

$$y|_{x=-0} = y|_{x=+0} ; \quad \frac{dy}{dx}|_{x=-0} = \frac{dy}{dx}|_{x=+0} \quad \text{in problem I.} \quad (3.1)$$

In problem II the conditions (3.1) are completed by the conditions

$$y|_{x=\xi-0} = y|_{x=\xi+0} ; \quad \frac{dy}{dx}|_{x=\xi-0} = \frac{dy}{dx}|_{x=\xi+0}. \quad (3.2)$$

There is

$$k(x) = \begin{cases} k^-(x), & \text{for } -1 < x < 0 \\ k^+(x), & \text{for } 0 < x < +\infty \end{cases}$$

where $k^-(x) > 0$.

In problem I it is

$$C_\xi(x) = \begin{cases} C^-(x), & \text{for } -1 < x < 0 \\ \frac{C^+(x)}{\xi^2}, & \text{for } 0 < x < +\infty \end{cases}$$

In problem II it is

$$C_\xi(x) = \begin{cases} C^-(x), & \text{for } -1 < x < 0 \\ \frac{C(x, \xi)}{\xi^2}, & \text{for } 0 < x < \xi, \\ \frac{C^+(x)}{\xi^2}, & \text{for } \xi < x < +\infty \end{cases}$$

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C111/C444

The asymptotic expansion of the...

$$C^-(x) \geq 0; \quad C^+(x) \geq p_0 > 0; \quad C(x, \varepsilon) = C_0\left(\frac{x}{\varepsilon}\right) + \varepsilon C_1\left(\frac{x}{\varepsilon}\right).$$

L_0 denotes the operator

$$L_0 y = - \frac{d}{dx} \left[k^-(x) \frac{dy}{dx} \right] + C^-(x) y,$$

where L_0 is applied on functions which are given only on the interval $[-1, 0]$, satisfying the conditions

$$y|_{x=-1} = y|_{x=0} = 0.$$

Under the supposition (4) L_0 possesses the discrete spectrum of the eigenvalues $\lambda_{10} < \lambda_{20} < \dots < \lambda_{i0} < \dots$.

(One supposes that all λ_{i0} are simple eigenvalues) and a corresponding complete orthonormal system of the eigenfunctions $y_{i0}(x)$. The

following theorems are proved:

Theorem 1: If $\lim_{x \rightarrow +\infty} \frac{C^+(x)}{\varepsilon^2} = \frac{C_0}{\varepsilon^2}$, then the spectrum of L_2 can only be

Card 3/5

The asymptotic expansion of the...

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C111/C444

discrete on the semiaxis $x < \frac{C_0}{\varepsilon^2}$, where the eigenvalues $\lambda_{i\varepsilon}$ of L_ε satisfy the inequality

$$|\lambda_{i\varepsilon} - \lambda_{i0}| < b_i \sqrt{\varepsilon},$$

b_i not depending on ε .

Theorem 2: For the eigenvalues $\lambda_{i\varepsilon}$ of L_ε and the corresponding eigenfunctions $y_{i\varepsilon}(x)$ of this operator there hold the asymptotic representations

$$\lambda_{i\varepsilon} = \lambda_{i0} + \sum_{k=1}^m \varepsilon^k \mu_k + \varepsilon^{m+1} \delta_{m+1}, \quad \delta_{m+1} = O(1),$$

$$y_{i\varepsilon}(x) = y_{i\varepsilon,m}(x) + \varepsilon^{m+1} z_{m+1}, \quad \|z_{m+1}\| = O(1),$$

where in problem I it is

$$y_{i\varepsilon,m}(x) = \begin{cases} y_{i0}(x) + \sum_{k=1}^m \varepsilon^k \omega_k(x) + \varepsilon^{m+1} \alpha_{m+1}(x), & \text{for } -1 < x < 0, \\ \sum_{k=1}^{m+2} \varepsilon^k v_k(x), & \text{for } 0 < x < \infty; \end{cases}$$

Card 4/5

The asymptotic expansion of the...

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C111/C444

analogous results hold for problem II, too.

[Abstracter's note: Complete translation.]

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Card 5/5

KRATIN, Yuriy Gennadiyevich; BEKHTEREVA, Nataliya Petrovna;
GUSEYNIKOV, Vladimir Ivanovich; KOZHEVNIKOV, Valeriy
Aleksandrovich; SENICHENKOV, Boris Tikhonovich; USOV,
Vladimir Vasil'yevich; KATINAS, G.S., red.izd-vn;
ZAMARAYEVA, R.A., tekhn. red.

[Technique and methods of encephalography] Tekhnika i
metodiki elektroentsefalografii. [By] IU.G.Kratin i dr.
Moskva, Izd-vo AN SSSR, 1963. 312 p. (MIRA 16:10)
(Encephalography)

ISMAILOV, R.G.; ALIYEV, S.M.; MAMEDALIYEV, G.M.; GUSEYNO, N.I.; AGAYEVA, M.A.

Isomerization of ethyltoluenes. Dokl. AN Azerb. SSR 21 no.6:18-21
'65. (MIRA 18:12)

1. Institut neftekhimicheskikh protsessov AN AzSSR.

GUSEYNOV, A.A., gvardii mayor meditsinskoy sluzhby

Pyrcafcaine for treating diseases of the peripheral nerves. Voen.-
med.zhur. no.7:89 J1 '56. (MIRA 9:11)

(NERVOUS SYSTEM--DISEASES)

(PHARMACOLOGY)

FARADZHEV, Terlan Guseyn; MAKHMUDOV, Dzhalal Museib; GUSEYNOV,
Arif Allakhyar

[Technology of boring viscous and plastic rock] [Tekhnologiya
bureniia viazkikh i plasticheskikh porod] Baky, Azerneshr,
1963. 203 p. [In Azerbaijani] (MIRA 17:5)